

## CLAIMS

I claim:

1. A system for aeration and chemical treatment of contaminated water, comprising:

5 a trough, said trough having at least one slat disposed therein for interrupting a stream of contaminated water flowing in said trough, said at least one slat having an upstream face and a downstream face;

10 a device for enhancing aeration and chemical treatment of said stream flowing through said trough, said device being removably mounted on said at least one slat.

15 2. A system for aeration and chemical treatment of contaminated water as recited in claim 1, wherein there are plural slats disposed in said trough and wherein each slat has a device for enhancing aeration and chemical treatment of said stream flowing through said trough mounted thereon.

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3. A system for aeration and chemical treatment of contaminated water as recited in claim 1, wherein said device comprises:

a first plate having a first end and a second end;

5 a plurality of spaced coplanar fingers extending from said first end, wherein said second end is positioned on said slat.

4. A system for aeration and chemical treatment of contaminated water as recited in claim 3, wherein each of said plurality of fingers terminates in a baffle member.

5. A system for aeration and chemical treatment of contaminated water as recited in claim 3, wherein said second end of said first plate is of a U-shaped configuration.

6. A system for aeration and chemical treatment of contaminated water as recited in claim 3, including a housing for containing a chemical log therein, said housing positioned adjacent said upstream face of said slat.

7. A system for aeration and chemical treatment of contaminated water as recited in claim 6, wherein said housing has an upper part and said upper part is fabricated from an open mesh material.

8. A system for aeration and chemical treatment of contaminated water as recited in claim 3, including:

a second plate having a first end and a second end;

5 a plurality of spaced coplanar fingers extending from said first end of said second plate, wherein said second end of said second plate is positioned on said second end of said first plate.

9. A system for aeration and chemical treatment of contaminated water as recited in claim 8, wherein each of said plurality of fingers extending from said first end of said second plate terminates in a baffle member.

10. A system for aeration and chemical treatment of contaminated water, comprising:

15 a trough, said trough having at least one slat therein for interrupting a stream of contaminated water flowing in said trough, said at least one slat having an upstream face and a downstream face;

a first plate having a first end and a U-shaped second end;

20 a plurality of spaced coplanar fingers extending from said first end, wherein said second end is positioned on said at least one slat;

a second plate having a first end and an L-shaped second end;

a plurality of spaced coplanar fingers extending from said first end of said second plate, wherein said second end of said second plate is positioned on said second end of said first plate.

5           11.     A system for aeration and chemical treatment of contaminated water as recited in claim 10, wherein each of said plurality of coplanar fingers extending from first end of said first plate and said first end of said second plate terminates in a baffle member.

10           12.     A system for aeration and chemical treatment of contaminated water as recited in claim 11, wherein each baffle member extends perpendicularly to each respective finger.

15           13.     A system for aeration and chemical treatment of contaminated water as recited in claim 10, wherein said plurality of fingers extending from first end of said first plate are positioned vertically below and are horizontally offset from said plurality of spaced coplanar fingers extending from said first end  
20 of said second plate.

          14.     A system for aeration and chemical treatment of contaminated water as recited in claim 13, including a housing for containing a chemical log therein, said housing positioned adjacent said upstream face of said slat.

15. A system for aeration and chemical treatment of contaminated water as recited in claim 13, wherein said housing has an upper part and said upper part is fabricated from an open mesh material.

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16. A system for aeration and chemical treatment of contaminated water as recited in claim 13 wherein said first plate and said second plate are fabricated from stainless steel.

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17. A system for aeration and chemical treatment of contaminated water as recited in claim 13, wherein said first plate and said second plate are fabricated from a polycarbonate material.

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